What Is Claimed Is:

1. Apparatus suitable for filtering emboli comprising:

an elongated member having a distal region having a longitudinal axis;

a support hoop;

a suspension member coupling the support hoop to the distal region so that the support hoop may be eccentrically laterally displaced relative to the longitudinal axis; and

a blood permeable sac affixed to the support hoop so that the support hoop forms a mouth of the blood permeable sac.

2. The apparatus of claim 1, wherein the blood permeable sac comprises a biocompatible material.

3. The apparatus of claim 2, wherein the biocompatible material comprises a material chosen from a group consisting of polyethylene, polypropylene, polyurethane, polyester, polyethylene tetraphlalate, nylon and polytetrafluoroethylene.

4. The apparatus of claim 1, wherein the blood permeable sac comprises a woven material having a plurality of pores, the pores having a size determined by a weave pattern of the woven material.

5. The apparatus of claim 4, wherein each one of the plurality of pores has a diameter in a range of 20 to 400 microns.

6. The apparatus of claim 1, wherein the support hoop comprises a super-elastic material.

7. The apparatus of claim 1, wherein the support hoop comprises stainless steel.

8. The apparatus of claim 1, wherein the support hoop includes an articulation region.

9. The apparatus of claim 1, wherein the apparatus has a deployed state, wherein the support hoop engages an interior wall of a patient's vessel, and a delivery state, wherein the apparatus has a contracted configuration to permit insertion within a delivery sheath.

10. The apparatus of claim 1, further comprising a single-use delivery sheath.

11. The apparatus of claim 9, wherein the mouth of the blood permeable sac is closed when the apparatus is in the contracted configuration to prevent emboli from escaping from the blood permeable sac.

12. The apparatus of claim 11 wherein opposite sides of the first support hoop close towards one another when the apparatus is contracted to its contracted configuration.

13. The apparatus of claim 1, wherein the first support hoop comprises a radiopaque feature.

14. The apparatus of claim 1, further comprising a tube disposed in the distal region, and the suspension strut and blood permeable sac are affixed to the tube.

15. The apparatus of claim 14 wherein the distal region has a reduced diameter to accept the tube.

16. The apparatus of claim 1 wherein the suspension strut further includes one or more side turns to stabilize and orient the apparatus in the deployed state.

17. The apparatus of claim 1 wherein the elongated member is a guide wire.

18. The apparatus of claim 14 further comprising a nose cone disposed on the tube.

19. The apparatus of claim 1, wherein the blood permeable sac has a length and a diameter that tapers along the length.

20. The apparatus of claim 1, wherein the blood permeable sac comprises a plurality of pores formed by laser drilling.

21. The apparatus of claim 1 further comprising a delivery sheath having a longitudinal perforation, the delivery sheath retaining the vascular filter in a contracted delivery state.

22. The apparatus of claim 21 further comprising an introducer sheath having a longitudinal slit, the introducer sheath facilitating insertion of the vascular filter into a guide catheter.

23. Apparatus suitable for filtering emboli comprising:

an elongated member having a distal region having a longitudinal axis;

a support hoop;

a suspension member coupling the support hoop to the distal region so that the support is disposed obliquely relative to the longitudinal axis; and

a blood permeable sac affixed to the support hoop so that the support hoop forms a mouth of the blood permeable sac.

24. The apparatus of claim 23, wherein the blood permeable sac comprises a biocompatible material.

25. The apparatus of claim 23, wherein the blood permeable sac comprises a plurality of pores having diameters in a range of 20 to 400 microns.

26. The apparatus of claim 23, wherein the support hoop includes an articulation region.

27. The apparatus of claim 23, wherein the apparatus has a deployed state, wherein the support hoop engages an interior wall of a patient's vessel, and a delivery state, wherein the apparatus has a contracted configuration to permit insertion within a delivery sheath.

28. The apparatus of claim 23, further comprising a single-use delivery sheath.

29. The apparatus of claim 23, wherein the mouth of the blood permeable sac is closed when the

apparatus is in the contracted configuration to prevent emboli from escaping from the blood permeable sac.

30. The apparatus of claim 23, further comprising a tube disposed in the distal region, and the suspension strut and blood permeable sac are affixed to the tube.

31. The apparatus of claim 30 wherein the distal region has a reduced diameter to accept the tube.

32. The apparatus of claim 23 wherein the elongated member is a guide wire and the guide wire further comprises an articulation region.

33. A method of filtering emboli from flow within a vessel comprising:

providing a vascular filter mounted on a distal region of an elongated member, the elongated member having a longitudinal axis, the vascular filter comprising a support hoop, a suspension member coupling the support hoop to the distal region and a blood permeable sac affixed to the support hoop;

inserting the distal region of the elongated member and the vascular filter into a vessel;

deploying the vascular filter within the vessel at a location at which the support hoop is eccentrically laterally displaced relative to the longitudinal axis and the support hoop forms a mouth of the blood permeable sac.

34. The method of claim 33, wherein providing a vascular filter further comprises providing a vascular filter wherein the blood permeable sac comprises a biocompatible material.

35. The method of claim 33, wherein deploying the vascular filter further comprises articulating the support hoop at an articulation region.

36. The method of claim 33, wherein deploying the vascular filter comprises engaging the support hoop in apposition to an interior wall of the vessel.

37. The method of claim 33 further comprising, after completion of a diagnostic or therapeutic procedure, closing the mouth of the blood permeable sac and retrieving the vascular filter.

38. The method of claim 33 wherein inserting the distal region of the elongated member and the vascular filter into a vessel further comprises:

providing a guide catheter having a valve;

providing an introducer sheath;

inserting the introducer sheath into the guide catheter through the valve;

inserting the distal region of the elongated member and the vascular filter through the introducer sheath into the guide catheter; and

removing the introducer sheath.

39. The method of claim 33 wherein the introducer sheath includes a longitudinal slit and removing the introducer sheath further comprises removing the distal region of the elongated member and the vascular filter from the introducer sheath through the longitudinal slit.

40. The method of claim 33 wherein:

providing a vascular filter mounted on a distal region of an elongated member further comprises providing a vascular filter mounted on a distal region of an elongated member enclosed within a delivery sheath, the delivery sheath having a longitudinal perforation; and

inserting the distal region of the elongated member and the vascular filter into a vessel further comprises advancing the distal region of the elongated member and the vascular filter to a desired location in the vessel, and then holding the elongated member stationary while retracting the delivery sheath.